Microsoft Exchange 5.5 Labs

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LAB # 1: Installation and Creating Recipients

To install Microsoft Exchange 5.5

Scenario: Each student is part of the Marine Corps hierarchy that includes the MITNOC, MARFORs, MEFs, and MSCs (Division, Wing, and FSSG). You will install Microsoft Exchange Server by creating a site for your specific command.

Install Exchange and create a new site:

1. Insert the Microsoft Exchange Server 5.5 CD allowing the auto run function to initiate the installation process.

2. Click **Accept** when the Microsoft Exchange Server Setup dialog box appears, displaying the End-User Licensing Agreement.

3. Click **Complete/Custom**.

4. Click to clear the **Outlook Web Access** check box and then click Continue.

5. In the Microsoft Exchange Server Setup dialog box, type **777-7777777** and then click **OK**. Click **OK** to confirm the product ID.

6. Select the **I agree that** check box and then click **OK**. The Organization and Site dialog box appears.

To create a new site:

1. Verify that Create a new site is selected.

2. To identify your Microsoft Exchange Site, use the information shown on logical diagram provided at the beginning of the MTT.

> Write the Organization and site names you are using:

> Organization: __USMC_____

> Site: _____

3. Click **OK**. A Microsoft Exchange Server Setup dialog box appears, asking if you want to create a new site. Click **Yes**.

To assign the Site Services Account: In this procedure, you configure the Exchange Server to use the previously created Site Services account.
1. In the **Site Services Account** dialog box, click **Browse**. The **Add User or Group** dialog box appears.

2. In the **Names** box, click **Service,** and then click **Add**. Click **OK** The **Site Services Account** dialog box appears, displaying the account name to use.

3. In the **Account Password** box, type **service** and the click **OK**. Note: when typing **service** be sure to use lowercase letters.

To run the Exchange Optimizer:

1. In the **Microsoft Exchange Server Setup** dialog box, click **Run Optimizer**. The **Microsoft Exchange Performance Optimizer** dialog box appears. Click **Next.**

2. Select the **Connector/Directory Import** check box. Click **Next**. Since our servers only have one hard drive, a dialog box appears, stating there is only one suitable drive. Click **Next.**

3. The **Microsoft Exchange Performance Optimizer** dialog box appears, stating that you have chosen not to move any files. Click **OK**, and then click **Finish**. The Exchange Server will then be rebooted.

To apply Exchange Service Pack 4

1. Insert the Exchange Service Pack 4 CD. Click **Start**, and then click **Run**. In the open box, browse to find **update**. A **Microsoft Exchange Server Setup** message box appears stating that setup is going to update your currently installed Microsoft Exchange Server. Click **OK**.

2. Files are copied and the Exchange Server is updated. Click **OK**.

Assign Microsoft Exchange Administrative Permissions. In this portion of the exercise, you add the Exchange Admins global group to the Organization, Site, and Configuration containers with the role of Permissions Admin.

1. **Click Start, point to Programs,** point to Microsoft Exchange, and then click Microsoft Exchange Administrator. The **Connect to server** dialog box appears, prompting for a server to which to connect. Type in or browse for your server-name. (Select the **Set as default** check box).

2. On the **Tools** menu, click **Options**.

3. Click the **Permissions** tab. Next, click **Display rights for roles on Permissions page** and then click **OK**.

To configure Organization permissions:

1. Click **USMC** and then on the **File** menu, click **Properties**. The **Organization Properties** dialog box appears. Click the **permissions** tab.

2. Click **Add**. The **Add Users and Groups** dialog box appears.

3. In the **Names** list, click **Exchange Admins**, and then click **Add**. Click **OK** to close the **Add Users and Groups** dialog box.

4. Click *your-domain\Exchange Admins*, and then in the **Roles drop-down list**, click **Permissions Admin**. Click **OK**.

To configure site permissions:

1. Click *your_sitename*, and then on the **File** menu, click **Properties**.

2. Click the **Permissions** tab. Click **Add**. The **Add Users and Groups** dialog box appears.

3. In the Names list, click Exchange Admins, and then click Add. Click OK to close the Add Users and Groups dialog box.

4. Click your-domain\Exchange Admins, and then in the Roles drop-down list, click Permissions Admin. Click OK.

To configure Configuration container permissions:

1. Expand *your_sitename*. Click **Configuration**, and then on the **File** menu, click **Properties**.

2. Click the **Permissions** tab. Next, click **Add**. The **Add Users and Groups** dialog box appears.

3. In the **Names** list, click **Add Users and Groups** dialog box. **Click *your-domain\Exchange Admins***, and then in the **Roles** drop-down list, click **Permissions Admin**. Click **OK**.

Lab #2: Utilizing Connectors

In this exercise, you configure the MTA transport stack to use the TCP/IP protocol, configure an X.400 Connector, and configure directory replication. Finally, to verify connector operation, mail is exchanged.

To install a TCP/IP MTA Transportation Stack

1. Switch to the Exchange Administration program.

2. On the **File** menu, point to **New Other, and then click MTA Transport Stack.** The **New MTA Transport Stack** dialog box appears.

3. In the **Type** list, click **TCP/IP MTA Transport Stack**.

4. In the Server list, *click your_servername,* and then click **OK**. The **TCP (your_servername) Properties** dialog box appears.

5. Click **OK** to allow all stack options to remain at their default values.

To create and configure an X.400 Connector to use the TCP/IP MTA Transport Stack

1. On the **File** menu, point to **New Other**, and then click **X.400 Connector**. The X400 Connector dialog box appears.

2. In the Type list, click TCP/IP X.400 Connector, and then click OK.

3. Click OK to switch to the Connections container.

4. Click each tab and fill in the appropriate values as shown in the following table.

General	In the **Display name** box, type *a_description_for_this_connector* For example: **X.400-TCP to I MEF** In the **Directory name** box, type *a-name-for-this-connector* For example: **X.400-TCP to I MEF** In the **Remote MTA name** box, type the distant ends server For example: **IMEFPDC** In the **Remote MTA name** password box, verify that <u>no password</u> is entered. In the **MTA transport stack** list, verify that *your_servername* **TCP** is selected.
Schedule	Verify that **Always** is selected.
Stack	In the **Address** box, type the *distant ends fully qualified domain name* For example: **IMEF.usmc.mil** <u>Do not specify</u> T, S, or P selector information.
Override	On the top line enter your *Local MTA name* (your server name)
Connected Sites	Click **New,** type the *distant ends site name.* Verify under the Routing Address tab that the **Organization** box displays the *distant ends site name,* the **Private Management Domain Name** contains the *Organization Name* and in the **Administrative Management Domain Name** box verify that **only a space** is entered. Click OK.
Advanced	No changes are required
Delivery Restrictions	No changes are required
Address Space	Click **New**, click **X.400** and then click **OK**. In the **Organization** box, type the *distant ends site name*. In the **Private management domain name** box, type **USMC**. In the **Administrative management domain name** box, verify that <u>only a space</u> is entered. Microsoft Exchange Server places this space automatically. In the **Country** box, verify that US is entered. Leave all other fields blank or at their default values. Click **OK**.

5. Click **OK** to close the *connector* **Properties** dialog box. A dialog box appears, stating that you must configure both sides of the connector.

6. Click **OK**.

Creating and configuring a Directory Replication Connector. To create a Directory Replication connector:

1. Switch to the Administrator program

2. On **File** Menu, Point to **New Other**, and then click **Directory Replication Connector**.

3. Click **OK** to switch to the Directory Replication container. A **New Directory Replication Connector Properties** dialog box appears.

4. In the **Remote site name** box, verify that *the_destination_site* is selected.

5. In the **Server in Remote** site box type *the_destination_bridgehead_server*.

6. Click to clear the Configuration both sites check box.

7. Click OK.

8. Click the **Schedule** tab.

9. Click **Always**.

10. Click **OK**.

Wait several minutes for directory replication to occur. If the adjacent sites do not appear after several minutes, you can speed the process by double-clicking the Directory Service object for your server in the container for your server.

You are not finished with Lab 2 until you have sent and received mail from a different site than your own.

Update These:
1. Highlight the Server Container. On the right side double click on Directory Service object. Click on Update Now, then the KCC.

2. Highlight the Directory Replication Container. On the right side double click the DR connector and from the Sites tab click **Request Now.**

Lab #3: Internet Mail Service

The goal of this lab is to configure Internet Mail Service for each site within your Organization in order to establish SMTP connectivity to the other students within the classroom setup. Each sever needs to have an MX record in the Domain Name System (DNS) of the MITNOC. If multiple servers exist within a site, only the bridgehead server should be configured with IMS. Once IMS is configured, connectivity will be tested by sending and receiving an SMTP email from the MITNOC.

To modify the SMTP address space to match the DNS entries:

1. Switch to the Microsoft Exchange Administrator Program. In the left pane, click the **Configuration** container for your site, and then in the right pane, double-click **Site Addressing**. Click the **Site Addressing** tab.

2. In the E-mail addresses list, click the **SMTP** address, and then click **Edit**. Modify the default SMTP address for your site based on the information entered in your DNS (i.e. I MEF: **@imef.usmc.mil**, II MEF: **@iimef.usmc.mil**).

3. Click **OK** to close the **SMTP properties** dialog box. Click **OK** to close the **Site Addressing Properties** dialog box. Click **Yes** if a Microsoft Exchange Administrator dialog box appears stating that SMTP addresses have been modified.

4. Click **OK** if Microsoft Exchange Administrator dialog box appears stating that a process has been started to update e-mail recipients.

To Synchronized directory information with each site:

1. Switch to the Administrator's program. In the left pane, expand the **Configuration container** for your site, expand the **Servers container**, and then click your_server container.

2. In the right pane, double-click **Directory Service**. Click **Update Now**. The Directory Update Type dialog box appears.

3. Verify that **Update only new and modified items** is selected, and then click **OK**. Click **OK** to close the Directory Service Properties dialog box.

To install and configure the Internet Mail Service on the sending and receiving Internet Mail Service computers: (Complete the next procedures on the receiving and sending servers.)

1. On the **File** menu, point to **New Other**, and then click **Internet Mail Service**. A Microsoft Exchange Administrator dialog box appears, asking if you want to switch to the **Connections** container.

2. Click **OK**. An Internet Mail Wizard dialog box appears, welcoming you to the Internet Mail Wizard. Click **Next**. The Internet Mail Wizard appears, informing you of the tasks that should be accomplished before continuing. Click **Next**.

3. The Internet Mail Wizard asks you to select the Exchange Server computer in your site on which you want to install the Internet Mail Service. Verify *your servername* appears, and then click **Next**.

4. The Internet Mail Wizard dialog box appears asking if you should allow other hosts to reroute mail. Click **Yes** and then click **Next**.

5. The Internet Mail Wizard dialog box appears, asking how you want to send e-mail. Verify **Use domain name system (DNS) to send e-mail (Typical)** is selected and click Next.

6. Verify **All internet mail address** (**Typical**) is selected and then click Next. If an Internet Mail Wizard dialog box appears asking you to specify the site address used to generate the e-mail addresses, click Next.

7. Click **Select a mailbox or distribution list**. Click **Select**. The Global Address List appears. Click *your_displayname*, and then click **OK**.

8. Click **Next**. The Internet Mail Wizard dialog box appears, stating that the wizard has finished gathering information and will now create the Internet Mail Service.

9. Click **Finish**. The Internet Wizard creates and configures the service, and then a message box appears, stating that the Internet Mail Service has been successfully installed and started. Click **OK** to close the Microsoft Exchange Administrator message box.

Lab #4: Connectivity to the MITNOC

Prior to the start of this lab, all students should have a means by which to email among all participants within the classroom setup. Each MEF and MARFOR should be able to send an receive email to all participants as well as have a list of all recipients (via SMTP or X.400 address space) in the Global Address List. The purpose of this exercise is to establish X.400 connectors and Directory Replication between all MEFs and MARFORs to the MITNOC.

Refer back to Lab #2 to establish the X.400 and Directory Replication Connectors to the MITNOC. Only the MARFORs and MEF bridgehead servers should conduct this exercise.

Lab #5: Monitoring Microsoft Exchange Server

In this exercise, you create a custom recipient with an invalid SMTP address at the MITNOC.usmc.mil, and then configure a Link Monitor to this non-existent SMTP recipient in the MITNOC domain. After all students have started their Link Monitors and received confirmation that the link is operational, the instructor stops the MITNOC IMS so that the configured actions of the Link Monitor are tested. The IMS will be restarted once all students have tested their Link Monitor.

To create the custom recipient:

1. Switch to Exchange Administrator. On the toolbar, click **New Custom Recipient**.

2. If a message appears, asking you to switch to the Recipients container, click **OK** to switch to the Recipients container.

3. Click **Internet Address**, and then click **OK**. The Internet Address Properties dialog box appears.

4. In the E-mail address box, type **your_alias@MITNOC.usmc.mil** and then click **OK**. (Your_alias = Your Site_LM, i.e. **IMEF_LM@MITNOC.usmc.mil**).

5. In the First box, type *your_servername* **LM Recipient** (for example, IMEF LM Recipient) and then click **OK**.

To create the Link Monitor:

1. On the **File** menu, point to **New Other**, and then click **Link Monitor**. If a message appears, asking you to switch to the Monitors container, click **OK** to switch to the Monitors container.

2. Configure the Link Monitor as specified in the following table:

General	In the **Directory name** box, type *your_server* **Link Monitor**. Do not specify a log file. In the **Polling interval group** box, in the **Normal** box, type 2 and verify that **Minutes** is selected. In the **Critical sites** box, type **30** and then click **seconds**.
Notification	Click **New**, click **Mail Message**, and then click **OK**. In the **Time delay** box, verify **15** is entered and then in the box displaying Minutes, type **S** for seconds. Click to **clear the Alert only** check box. Click **Recipient**, click *your_displayname*, and then click **OK**. Click **OK**, and then click **OK** again.
Servers	Select all servers in your site, and then click **Add**.
Recipients	In the **Message subject returned from** dialog box, click **Modify**. Click *your_servername* **LM Recipient**, click **Add**, and then click **OK**.
Bounce	In the **Enter warning state after** box, type **3** and then verify **Minutes** is selected. In the **Enter alert state after** box, type **5** and then verify **Minutes** is selected.

3. Click **OK** to create the Link Monitor.

4. In the left pane, *expand your_sitename*, and then click **Recipients**. In the right pane, double-click *your_servername* **LM Recipient**. Click the **Advanced** tab.

5. Select the **Hide from address book check box**, and then click **OK**.

To start the Link Monitor:

1. In the left pane, click Monitors, and then in the right pane, click your_server Link Monitor.

2. On the Tools menu, click Start Monitor. In the Connect to server dialog box, type your_servername and then click OK. The Monitor your_alis Link Monitor (server_name) dialog box appears, indicating that the link has not been measured yet. Wait a few moments for the link to be measured and green arrows to appear. Notify an instructor when your link becomes operational.

To observe a malfunctioning connection:

1. Switch to Microsoft Outlook 2000. Wait several minutes, did you receive the e-mail message that was configured in the last procedure? If yes, what did the message indicate was wrong?

2. After a few moments, after the link Monitor indicates that the link is operational, close the Link Monitor.

Lab #6: Outlook 2000

Create a New Profile

To create a new profile from Control Panel, follow these steps:

1. On the Start menu, point to Settings, and click Control Panel. Double-click the Mail And Fax icon. (The icon is a Mail icon if you did not install fax services.)

2. On the Services tab, click Show Profiles to list your profiles.

3. Click Add to open the Inbox Setup Wizard.

4. Make sure that the default is set to "Use the following information services."

5. Click to choose MS Exchange Server . (For troubleshooting purposes, add only one service at a time).

6. Click Next. In the Profile Name box, type a name for the new profile.

7. Follow the Inbox Setup Wizard prompts, answering the questions for your service until you finish.

Creating an Offline Folder File for Offline access

To create an offline folder file, follow these steps:

1. Open Outlook 2000.

2. On the Tools menu, click Services.

3. Click to select Microsoft Exchange Server, and then click Properties.

4. On the Advanced tab, click the Offline Folder File Settings.

5. Type the path to the file you want to use as the offline folder file.

   NOTE: Keep all Outlook related files (.ost, .pst, .pab, archive.pst) on a different partition other than C:\. The default is to create these files as part of the local profile. If NT needs to be re-installed your files will be overwritten!

6. If the message stating that the "<path><filename> .ost could not
7. be found. Would you like to create it?" appears, click OK, OK, OK

Create a New Outlook Personal Folder

To create a PST follow, these steps:

1. Open Outlook 2000

2. On the File menu, point to New, and click Personal Folder File (.pst).

3. In Create Personal Folders, select a folder location (remember what happens if NT is re-installed?), and then enter the name (your name) for the PST. Click Create.

4. In Create Microsoft Personal Folders, type (your name) for the new folder. Click OK.

   NOTE: If you choose to use a password, you may enter it at this point. You will be asked to provide the PST password when you restart Outlook.

5. In the Folder List, right-click the new PST you created and on the menu click New Folder.

6. In Create New Folder, ensure that Mail Items is selected in Folder Contains. In 'Select Where To Place The Folder' Personal Folders should already be selected.

7. Type a new name in the Name box. Click OK.

8. You are then prompted to add a shortcut on the Outlook Bar if you want.

Lab #7: Outlook Web Access

To install Outlook Web Access

1. Insert the MS Exchange 5.5 cd.
2. Click Setup Server and Components
3. Click Microsoft Exchange Server 5.5
4. Click Add/Remove button
5. **Check all boxes including Outlook Web Access**
6. Select Continue
7. When finished, re-install the Exchange SP4

Configuring Exchange Server

After the OWA components are installed, you can use the Exchange Administrator to ensure that they are configured properly.

1. Start Exchange Administrator, verify that the HTTP protocol is enabled:

2. Expand the site tree, select **Configuration,** then **Protocols,** and verify that the **HTTP (Web) Site Settings** object appears on the right side.

3. Select that object if you wish to configure additional settings.

4. **NOTE:** On the NT server where IIS is installed, grant Log On Locally rights to the anonymous account 'iuser_servername'. Otherwise no one will be able to logon and access their mail from a web browser. Also, if IIS is not installed on the same server as Exchange, the authentication methods chosen must be Allow Anonymous Access and Basic Authentication.

5. To test OWA, open IE and in the address bar type:
    http://servername/exchange